

# OFFER FOR IOWANS

## IDENTIFYING INFORMATION

**Offer Identifier:** H\_588\_3

**Offer Name:** Building Healthy Communities in Iowa—Healthy Children and Families

**This offer is for a:** status quo existing activity.

**Result(s) Addressed:** Improve Iowans Health

**Participants in the Offer:** IDPH, University of Iowa, University of Iowa Hygienic Laboratory, Child Health Specialty Clinics, Iowa Department of Human Services, Iowa Department of Education, Iowa State University Extension, University of Northern Iowa.

**Additional stakeholders:** Iowa maternity hospitals, families of newborns, March of Dimes, private medical providers, local Boards of Health, child health policy advocates, Iowa Hospital Association, Iowa Medical Society, Iowa Chapter of the American Academy of Pediatrics, Iowa Academy of Family Physicians, local school health programs (including school nurses), child care providers, children with special health care needs (regardless of socio-economic status), families with low income and uninsured children, and immigrant families.

**Person Submitting Offer:** Mary Mincer Hansen, RN, PhD

**Contact Information:** Iowa Department of Public Health; Phone: 515-281-8474 Fax: 515-281-4958

## OFFER DESCRIPTION

The Health Buying Team is seeking offers that assure “All Iowans Have Access to Quality Care,” that “Improve Preventative Strategies and Health Education,” and “Improve Quality of Life.” The Iowa Department of Public Health, in collaboration with the partners listed above, proposes to use state appropriations in performing the following activities to achieve these strategies:

- 1) **Congenital and Inherited Disorders:** Initiate, conduct, and supervise genetic investigations and research concerning the causes, prevention, treatment, and cure of birth defects as mandated by Iowa law. Provide programs that address all steps of the life cycle: prenatal, neonatal, pediatric, adult, and elderly, through collaborative agreements with the University of Iowa. The University of Iowa Hygienic Lab (Iowa’s public health laboratory) does the testing for the Iowa Neonatal Metabolic Screening Program and the Maternal Serum Alpha-fetoprotein Screening Program, Regional Genetic Consultation Services, and Iowa Registry for Congenital and Inherited Disorders. Stakeholders include Iowa maternity hospitals (86), families of newborns, and the March of Dimes. Funding is provided by state general funds (\$616,446), tobacco funds (\$26,000), and federal (\$115,921) and other funds (\$203,568).
- 2) **Lead Poisoning Prevention:** Provide lead awareness, prevention, and screening services for adults and children directly and through local providers. Provide medical case management to families with lead-poisoned children to ensure that they reduce their blood lead levels. Educate communities about the hazards of lead poisoning and strategies for preventing childhood lead poisoning in their communities. Funding is provided by the CDC (\$687,870), state general funds (\$251,808), and tobacco funds (\$76,388).

- 3) **Maternal and Child Health (MCH):** Identify and investigate health problems of mothers and children, including children with special health care needs, through state and community partnerships. Inform families and providers about maternal and child health issues and resources available to promote quality care for special populations. Mobilize community partnerships and leadership for priority setting, planning, and policy development to assure the health of women, children, and their families. Link women and children to health and other community and family services to assure access to comprehensive, quality, family-centered systems of care. Provide direct care for preventive health services and specialty care for children with special health care needs in areas of the state where gaps in care exist. Partners include 32 regional, community-based Maternal & Child Health Centers that serve families in all 99 counties; the University of Iowa – the Child Health Specialty Clinics provides Iowa’s program for children with special health care needs, the Statewide Perinatal Review Team provides professional training, development of standards/guidelines of care, consultation to regional and primary providers and evaluation of the quality of care delivered, and the Center for Public Policy conducts a family household survey; the Iowa Department of Human Services – the Medicaid program supports the Early Periodic Screening and Treatment Program, and the Child Care Unit/Healthy Child Care Iowa ensures quality/health & safety in child care; the Iowa Department of Education - Early ACCESS IDEA, Part C, which provides services to families with children with developmental delay; Iowa State University Extension, which oversees the Iowa Healthy Families Information & Referral Toll Free line and the Teen Line; the University Northern Iowa, which conducts the Barriers to Prenatal Care survey; and Community Empowerment Early Childhood Comprehensive Systems planning initiative. Stakeholders include Iowa maternity hospitals (86) and families of newborns, private medical providers, local Boards of Health, child health policy advocates, Iowa Hospital Association, Iowa Medical Society, Iowa Chapter of the American Academy of Pediatrics, Iowa Academy of Family Physicians, local school health programs (including school nurses), child care providers, children with special health care needs (regardless of socio-economic status), families with low income and uninsured children, and immigrant families. Funds are provided by state general funds (\$1,303,576) and federal funds (\$9,167,668).

To support and strengthen the above activities, IDPH will perform the following activities using federal or other sources of funding:

- 1) **Nutrition Education:** Administer the Special Supplemental Nutrition Program for Women, Infants, and Children up to the age of five years (WIC). WIC provides nutrition counseling and education, breastfeeding promotion and support, checks for nutritious foods, health and social service referrals. Eligibility is based on income, Iowa residence, and a medical or dietary need. WIC is not a welfare program; many working families participate. Participants receive checks for specific nutritious foods redeemable at over 700 grocery stores and pharmacies across Iowa. There are WIC clinics in all 99 Iowa counties.
- 2) **Family Planning:** Promote the health of persons of reproductive age and families, especially low-income women. Provide accessible family planning services to prevent unwanted pregnancies, sexually transmitted diseases, and other disease conditions. Clinics provide preventive health services that promote the health and well being of women & men of reproductive age. Local agencies provide clinical services, client education and counseling, and community outreach and education. The agencies provide reproductive health services, including health screening and referral, family planning methods, pregnancy testing and referral, and screening and treatment of sexually transmitted diseases.
- 3) **Abstinence Education:** Facilitate coordination and collaboration within communities to support innovative, creative, community-based abstinence only education programs. Goals are to lower the pregnancy rate among teenagers, reduce the proportion of adolescents who engage in sexual intercourse, reduce the incidence of youths 15-19 years old who have contracted selected STDs,

increase the number of communities that focus on abstinence through abstinence-only education, identify effective interventions through evaluation processes, and increase the state level of collaboration related to abstinence. Provide support to public and private entities for the development and implementation of abstinence education programs as defined by Section 510 of Title V of the Social Security Act.

- 4) **CDC Early Hearing Detection:** Ensure that hearing loss is detected early in life and that appropriate follow-up and intervention are available. Provide technical assistance and consultation for birthing hospitals and Area Education Agencies relative to their newborn hearing-screening programs. Provide free technical assistance from audiologists to hospitals and AEAs regarding EHDI (Early Hearing Detection and Intervention) program management through contracts with the Center for Disabilities and Development (CDD) at the University of Iowa. Offer “Small Equipment Grants” enabling many non-screening hospitals to purchase newborn hearing screening equipment. Establish a reporting and monitoring system to assure that all newborns are screened and needed follow-up is available.

### **OFFER JUSTIFICATION**

**Return on investment:** Iowa’s \$2,374,246 investment is enhanced by \$47,241,063 in other sources of funding including federal funding, intrastate receipts, private grants, and retained fees. The Title V (of the federal Social Security Act) Maternal and Child Health Block Grant requires a state match of \$3 for every \$4 in federal funds received. Thus, reducing state funding for congenital and inherited disorders, lead poisoning prevention, and maternal and child health will result in a substantial reduction in federal funding for health services to women and children. State funds used for Medicaid EPSDT are matched at a rate of \$1 federal for every \$1 in state funds.

Early identification and treatment for metabolic disorders can lower potential medical costs and reduce the need for special education services. Genetic counseling can assist parents in planning for future pregnancies. Iowa’s hospitalization rates for children are 5-10% lower than the reported national average. Reducing disabling conditions can reduce special education costs. Fees for birth certification and laboratory screening provide partial funding for these services.

For every \$1 spent on family planning services to prevent unintended pregnancy, over \$4 is saved in prenatal and delivery costs. Every \$1 spent on WIC saves \$3.54 in Medicaid costs.

### **Disparate and at risk/vulnerable populations:**

The services in this offer serve all Iowa children and their families. MCH serves all Iowa families, with a focus on low-income families, especially multicultural and rural. Community-based agencies working in partnership with state health care experts assure that all pregnant women, including recent immigrants, have access to high quality obstetrical care, prenatal education, risk reduction and health supervision. Family planning services are available to low-income women (below 150% of poverty) seeking to delay/prevent pregnancy. Technical assistance is available to public health and private providers serving vulnerable populations to assure that all children, particularly those with low income or limited availability, including children with special health care needs, have access to quality, culturally competent child health services. This offer benefits all adults and children in Iowa who are exposed to lead with a particular focus on Hispanic populations in areas of pre-1950 housing. The WIC program serves pregnant and postpartum women, infants, and children up to age five at or below 185% of poverty.

### **Impact on Iowans**

Newborn screening, surveillance, and follow-up monitoring are demonstrated public health strategies for effective disease prevention. Programs are modeled after Newborn Metabolic Screening for PKU. Once inborn errors in metabolism and other disorders are detected, long-term effects can be mitigated. Over

38,000 newborns received metabolic screening in FY03 and nearly 500 children were seen through the regional genetics program. Genetic services advance the health and well being of individuals with genetic conditions and special health needs in partnership with families, health and human services providers, and communities. Population surveillance for congenital and inherited diseases of the newborn as well as targeted genetic screening for prenatal, pediatric and adult special populations provides early identification and linkages with specialty services that may mitigate the potential devastating effects of illness. Individuals with or at risk for a genetic disorder, chromosome abnormality, metabolic disorder, birth defect, or condition influenced by genetic factors are identified. With early diagnosis and medical treatment, complications from these serious but uncommon conditions can usually be prevented. Early identification and treatment for metabolic disorders can lower potential medical costs and reduce the need for special education services. Genetic counseling can assist parents in planning for future pregnancies.

Childhood lead poisoning has significant effects on the health of children and on community health. Lead is especially harmful to the developing brains and nervous systems of children under the age of six years. At very high blood lead levels, children can have severe brain damage or even die. At blood lead levels as low as 10 micrograms per deciliter ( $\mu\text{g/dL}$ ), children's intelligence, hearing, and growth are affected. Statewide, the prevalence of lead poisoning among children under the age of six years is 12.3%. This is nearly three times the national average of 4.4%. Testing, providing medical and environmental case management to children identified as lead-poisoned, and providing education and outreach about childhood lead poisoning to communities are important ways to reduce lead-poisoning.

Approximately 116,000 Iowa children and 10,000 women receive maternal and child health services. Every child deserves a medical and dental home. By assuring that needed health care and related resources exist for children and families, quality of life is increased, institutionalization is minimized, and health care costs are reduced. Meeting the unique health care and developmental needs of children contributes to intact families in which children can grow and thrive. While growing families vary in their ability to respond to unmet needs, all Iowa families need linkages to high quality, affordable care and support services. Coordinated, community-based linkages to resources designed to respond to the needs of children and families are an investment in Iowa's future. Community-based preventive health services maximize potential for normal growth and development of children and minimize the effect of chronic conditions. Iowa's hospitalization rates for children are 5-10% lower than the reported national average. Reducing disabling conditions can reduce special education costs. More than 18,000 Iowa women and men were provided family planning services in 2003. For every \$1 spent on family planning services to prevent unintended pregnancy, over \$4 is saved in prenatal and delivery costs. An investment of \$1 in immunizations prevents over \$6 in direct medical costs later in the child's life.

WIC serves 66,600 pregnant, low-income women, infants, and children each month. Pregnancy and infancy are critical nutrition stages of life to promote and ensure healthy outcomes. Nutrition counseling and education, checks for nutritious foods, and breastfeeding promotion and support increase the health status of Iowa families. Currently, about 66% of Iowa infants are breastfed at birth and about 32% are still breastfed at 6 months. Formula fed infants have three times more respiratory illnesses and two times as many ear infections as breast-fed infants.

#### **PERFORMANCE MEASUREMENT AND TARGET**

Percent of children who receive newborn metabolic screening: 99.7%.

Percent of all children ages 0-3 receiving early intervention services: 2%.

Percent of Iowa's children (<6 years) receiving a blood lead test: Baseline – 57% in 2003. Target – 65%.

Percent of Iowa's lead tested children considered poisoned ( $\geq 10$  micrograms/deciliter): Baseline – 8.5% in 2003. Target – statistically significant decrease.

Percent of women enrolled in Title V programs who receive prenatal care in the first trimester: 90%.

Percent of children served by Title V who report a medical home, excluding children with special health care needs: 55%.

Percent of Medicaid-enrolled children, ages 0-19 years, participating in Early Periodic Screening Diagnosis and Treatment (EPSDT): 80%.

Percent of Medicaid-enrolled children, ages 0-21 years, who receive any dental service: Baseline 41.7% in 2003. Target – 43%.

Percent of women served by IDPH family planning program whose income is at or below 150% of poverty: 70%.

Percent of infants breastfed at birth: Baseline 66% in 2003. Target – 75%.

Percent of infants breastfed at six months: Baseline 32% in 2003. Target – 50%.

### **PRICE AND REVENUE SOURCE**

**Total Price: \$49,615,309 (\$2,374,246 state)**

<b>Expense Description</b>	<b>Amount of Expense</b>	<b>FTEs</b>
Status Quo Direct Costs	47,931,405	52.15
Status Quo Administrative Costs	1,683,904	7.95
<b>Total</b>	<b>49,615,309</b>	<b>60.10</b>

<b>Revenue Description</b>	<b>Amount</b>
Status Quo General Fund	2,271,858
Status Quo Tobacco Fund	102,388
<b>Total State Funds</b>	<b>2,374,246</b>
Other (intrastate receipts, private grants, retained fees, etc.)	1,460,494
Federal Funds	45,780,569
<b>Total Other Sources of Funding</b>	<b>47,241,063</b>
<b>Total</b>	<b>49,615,309</b>

# OFFER FOR IOWANS

## IDENTIFYING INFORMATION

**Offer Identifier:** H\_588\_11

**Offer Name:** Building Healthy Communities in Iowa—Disease Free Iowa Through Vaccines

**This offer is for a:** status quo existing activity.

**Result(s) Addressed:** Improve Iowans Health

**Participants in the Offer:** IDPH, Local Public Health, Community-Based Organizations, Iowa Department of Human Services, Iowa Department of Education

**Person Submitting Offer:** Mary Mincer Hansen, RN, PhD

**Contact Information:** Iowa Department of Public Health; Phone: 515-281-8474; Fax: 515-281-4958

## OFFER DESCRIPTION

The Health Buying Team is seeking offers that assure “All Iowans Have Access to Quality Care,” that “Improve Preventative Strategies and Health Education,” “Mitigate Against Outside Risk Factors,” and “Improve the Health Care System.” The Iowa Department of Public Health, in collaboration with the partners listed above, proposes using state appropriations for the following activities to achieve these strategies:

- 1) **Vaccine Preventable Diseases:** Provide childhood vaccines to ensure that children receive measles, mumps, rubella, haemophilus b, influenza type b, polio, diphtheria, pertussis, pneumococcal conjugate, hepatitis, tetanus, and varicella immunizations. IDPH distributes vaccines to public and private healthcare professionals to provide immunization services to eligible individuals. Healthcare professionals administer vaccines and provide immunization education. Provide IDPH funding (I-4 contracts) to Iowa public health agencies to reduce and ultimately eliminate the incidence of vaccine preventable diseases by achieving and maintaining high vaccination coverage levels (90%), improving vaccination strategies among under vaccinated populations, and removing barriers to immunizations. Assign field personnel across the state to assist local public health clinics providing immunization services. Assist schools and local public health nurses to encourage disease reporting and to ensure proper vaccine handling and storage.

To support and strengthen the above activities, IDPH will perform the following activities using federal or other sources of funding:

- 1) **Immunization Registry Information System (IRIS):** Ensure that children are age-appropriately immunized by the collection of immunization histories on children. The system allows public and private providers to exchange information regarding the immunization status of their patients. This system maintains vaccine inventory and provides recall/reminder activities. IRIS has over 350 providers and 850,000 patient records.

## OFFER JUSTIFICATION

**Return on Investment:** Iowa’s investment of \$419,767 in vaccine preventable diseases is enhanced by \$1,707,291 in other sources of funding including federal funding and private grants for immunization

information. The state also receives approximately \$6.6 million in direct assistance from the CDC to purchase vaccines. The occurrence of vaccine preventable disease is reduced preventing the morbidity and mortality and the cost associated with each. For every \$1 spent on the measles-mumps-rubella (MMR) vaccine there is a savings of more than \$21 in direct medical care costs; for every \$1 spent on diphtheria-tetanus-acellular pertussis (DTaP) vaccine there is a savings of more than \$30; and, for every \$1 spent on polio vaccine there is a savings of more than \$6. It is estimated that the 1989 - 1991 U.S. measles outbreak cost over \$100 million in direct medical care.

**Disparate and at risk/vulnerable populations:** The combined state and federal funding provides these services to all Iowans regardless of age, race or ethnicity, or socioeconomic status. Particular attention is provided to children in need of immunizations from birth to 18 years of age who meet the following criteria: no health insurance, underinsured, American Indian or Alaskan Native or a child enrolled in Medicaid.

**Impact on Iowans:** Few public-health measures can compare with the benefits of vaccines. The country's experience with the ravaging effects of disease, primarily among youth, has shown that vaccines can play a powerful role in preventing debilitating and, in some cases, fatal effects of infectious diseases. In the 1950s, polio infected 7,813 Iowans, requiring them to need braces, crutches, wheelchairs, and iron lungs. Additionally, before vaccines, most children had measles. Some survivors were left with deficits or defects ranging from seizures to severe mental retardation. During the 1960s, more than 35,433 Iowans contracted rubella, some resulting in children born with major malformations, including deafness, blindness, congenital heart disease, and mental retardation.

None of these organisms have disappeared. Rather, they have receded into the background due to the remarkable effect that vaccines have had in preventing them. They will re-emerge if vaccination coverage drops. For example, the risk of disease being reintroduced to the United States has increased due to international travel and populations within the United States that are not accepting vaccination.

Vaccines protect more than the vaccinated individual. They protect society as well. When immunization levels in a community are high, the few who cannot be vaccinated (those too young for vaccination or who have legitimate reasons to avoid immunization due to allergic reactions, etc.) are often indirectly protected because they are surrounded by vaccinated persons who are protected against disease (herd immunity).

Despite this unprecedented progress, efforts to increase vaccination coverage must be intensified, particularly for children in poverty. In Iowa, pockets of need continue in both urban and rural areas. Children with disabilities are also at greater risk for disease and/or complications from disease and need to be targeted to assess vaccine status and initiate vaccinations when needed. These areas are of great concern because of the potential for disease outbreaks.

High immunization coverage has proven to be highly effective in reducing the number of childhood vaccine-preventable diseases to record low levels. Data on the spread of disease and viruses show a post-immunization drop in native transmission of vaccine preventable diseases.

Polio has already been eliminated in the United States by high vaccination coverage. Reported cases of diphtheria and tetanus are also near zero due to widespread use of vaccine. However, everybody must be vaccinated and exposure to tetanus minimized to achieve the goal of zero cases. Reported cases of pertussis will likely decrease by further increase in vaccine coverage, but it will continue to occur since the organism circulates among older children and adults and immunity wanes over time.

Hepatitis B infection will be greatly reduced as children covered by universal infant and adolescent immunization are immunized. Conjugate vaccines for the prevention of *Haemophilus influenzae* type B are highly effective and further reductions in disease are anticipated. With increased use of varicella vaccine, a decline in varicella cases, and subsequent deaths, is also anticipated.

Maintenance of high immunization coverage in early childhood is the best way to prevent the spread of vaccine-preventable diseases in childhood and provide the foundation for controlling vaccine-preventable diseases among adults. Although coverage levels are currently the highest ever recorded, the introduction of varicella and hepatitis B vaccines in the childhood immunization schedule highlight the need to continuously monitor levels and to search for gaps in coverage.

In 1995, the immunization rate of children being served in Iowa's public sector clinics that received their full series of childhood immunizations by 24 months of age was 78%. Currently, the immunization rate of children seen in the same setting has increased to 89.8%. National Immunization Survey (NIS) data as conducted by the Centers for Disease Control and Prevention indicates 81.1% of all Iowa children 19-35 months of age received their full series of childhood immunizations in 2003, compared to 78.1% in 1998.

#### **PERFORMANCE MEASUREMENT AND TARGET**

Percent of Iowa children aged 19-35 months receiving full series of immunizations (4 DTP, 3 Polio, 1 MMR, 3 Hib, 3 HepB): Baseline (2003 NIS data) – 81.1%. Target – 90%

Percent of children served in Iowa's public sector clinics that are fully immunized by 24 months of age: Baseline (2004 Public Sector Data) – 89.8%. Target – 90%.

#### **PRICE AND REVENUE SOURCE**

**Total Price: \$2,127,058 (\$419,767 state)**

<b>Expense Description</b>	<b>Amount of Expense</b>	<b>FTEs</b>
Status Quo Direct Costs	2,051,077	14.70
Status Quo Administrative Costs	75,981	2.24
<b>Total</b>	<b>2,127,058</b>	<b>16.94</b>

<b>Revenue Description</b>	<b>Amount</b>
Status Quo General Fund	419,767
<b>Total State Funds</b>	<b>419,767</b>
Other (private grants)	7,553
Federal Funds	1,699,738
<b>Total Other Sources of Funding</b>	<b>1,707,291</b>
<b>Total</b>	<b>2,127,058</b>



# OFFER FOR IOWANS

## IDENTIFYING INFORMATION

**Offer Identifier:** H\_588\_6

**Offer Name:** Building Healthy Communities in Iowa—Defeating Disease in Iowa

**This offer is for a:** status quo existing activity.

**Result(s) Addressed:** Improve Iowans Health

**Participants in the Offer:** IDPH, Local agencies, State and local Disease Prevention Specialists, Regional TB coalitions, University of Iowa Hygienic Laboratory.

**Additional stakeholders:** Family planning clinics, STD clinics, student health centers, correctional facilities, community health centers, and non-Title X women's health centers, alternative high school clinics.

**Person Submitting Offer:** Mary Mincer Hansen, RN, PhD

**Contact Information:** Iowa Department of Public Health; Phone: 515-281-8474; Fax: 515-281-4958

## OFFER DESCRIPTION

The Health Buying Team is seeking offers that assure “All Iowans Have Access to Quality Care,” and that “Improve Preventative Strategies and Health Education.” The Iowa Department of Public Health, in collaboration with the partners listed above, proposes using state appropriations for the following activities to achieve these strategies:

- 1) **Sexually Transmitted Diseases (STDs):** The IDPH Bureau of Disease Prevention and Immunization contracts with the University of Iowa Hygienic Laboratory to distribute chlamydia test kits to local health departments and other test sites throughout Iowa, and to provide laboratory assistance for detection, diagnosis, treatment, and patient follow-up of chlamydia.
- 2) **Tuberculosis (TB):** The Bureau of Disease Prevention and Immunization provides evaluation and treatment to patients with TB infection or disease, consultative services to the public and medical professionals regarding patient follow-up, and distributes medication to treat or prevent TB. Local public health agencies provide TB follow-up including patient follow-up, contact investigations, and directly observed therapy (healthcare worker observing patient taking medication). Funding supports 1 FTE to coordinate quality assurance for receiving prescriptions from physicians and distributing prescriptions to contract pharmacy for dispensing and data collection.
- 3) **Prescription Services:** The prescription service program provides annual therapeutic treatments for 2,200 people with TB and 10,000 people infected or exposed to STDs. Funds support a contract with a pharmacy to dispense medications statewide, and assure that medication for active cases of TB are shipped within 24 hours of receiving the prescription. The majority of these individuals have no other means of paying for prescription services, and therefore, are likely to transmit these highly infectious diseases to others. If there are funds remaining, they are used to support the AIDS Drug Assistance Program (ADAP). The ADAP provides limited prescription services for individuals who have no other means to pay for needed medication. Beginning in May 2004, ADAP initiated a waiting list for individuals eligible for ADAP due to lack of funding. Additional funding would allow for a higher

cap for individuals eligible for the ADAP.

To support and strengthen the above activities, IDPH will perform the following activities using federal or other sources of funding:

- 1) **Ryan White HIV CARE Act:** Through this Act, IDPH provides essential health and support services to individuals who test positive for human immunodeficiency virus (HIV) and their families. These services include reimbursement for medical/dental care, mental health/counseling, patient follow-up, and direct support of emergency services. IDPH contracts with consortia to provide essential health and support services to clients living with HIV. IDPH provides management oversight of the contracted agencies to assure that the Ryan White Care Act objectives are met. IDPH administers the AIDS Drug Assistance Program.
- 2) **Sexually Transmitted Diseases:** The IDPH, through the STD program, provides treatment (medication access) and prevention to reduce the incidence and spread of HIV/AIDS, syphilis, gonorrhea, chlamydia, and other sexually transmitted diseases. Field personnel (Disease Prevention Specialists) are assigned across the state to provide clinical and laboratory assistance for detection, diagnosis, treatment, patient follow-up, patient interviews, and contact follow-up activities. Additionally, state and local disease prevention specialists provide patient counseling and referral services. Local agencies provide screening, testing and treatment services.

The IDPH STD Program has a contract with the Family Planning Council of Iowa to oversee the Iowa Infertility Prevention Project (IIPP). The IIPP seeks to screen all women less than 25 years of age and those at risk who are over 25 years of age for Chlamydia and to provide medication at no cost for those infected with STDs. Ninety percent of women have no symptoms until complications arise. By this time, costs are 10 to 100 times greater than initial treatment. There are currently 71 clinics enrolled in the IIPP. Most are family planning clinics, but STD clinics, student health centers, correctional facilities, community health centers, and non-Title X women's health centers are also included. Late in 2002, two alternative high school clinics, the Indian Health Service, and the Scott and Muscatine County jails were added. Seventy-four percent of the testing done for the IIPP is completed in Family Planning clinics.

- 3) The **AIDS Prevention and Surveillance Project** carries out a comprehensive AIDS prevention program aimed at education, prevention, case detection, contact tracing, and statistical data collection. It provides testing for the presence of HIV and educates targeted populations on behaviors that place people at high risk for exposure to HIV infection. The HIV Community Planning Group assists the state in prioritizing HIV Prevention Services. IDPH provides contracts and oversight to contracted agencies for counseling, testing, and referral services to high-risk clients. The project provides evidence-based prevention interventions to HIV positive individuals and high-risk negative clients. IDPH staff monitors the HIV epidemic and generates surveillance reports and trend information.

### **OFFER JUSTIFICATION**

**Return on Investment: Sexually Transmitted Diseases and HIV Programs:** Iowa's investment of \$286,073 in infectious and communicable disease prevention and treatment is enhanced by \$5,505,038 in other sources of funding including federal funding, intrastate receipts, and private grants for comprehensive HIV/AIDS prevention, care, and treatment, and STD/HIV testing. Funding for STD and HIV services comes primarily from federal dollars. Most STD's and early stages of HIV have no symptoms. The HIV lifetime treatment cost is \$154,402 per person whereas the cost of providing prevention services ranges from approximately \$37 - \$423 depending on the type of intervention services provided. Early treatment and coordination of services provide for increased quality of life and decreased complications.

The Institute of Medicine (IOM) report, “The Hidden Epidemic,” estimates that only \$1 is invested in STD prevention for every \$43 spent on the STD-associated costs every year. STD prevention efforts are cost-effective and produce cost-savings benefits. Preventative services will avert substantial human suffering and save billions of dollars in treatment costs that result from the costly complications of STDs and lost productivity. The IOM also reports that public funding for STD prevention is justified because STDs are communicable diseases that, when left unchecked, potentially endanger the health of the community. By screening for Chlamydia, healthcare costs are reduced. It is estimated that the nation spends \$1.7 billion annually on costs associated chlamydia infections. Forty percent of chlamydia cases will develop Pelvic Inflammatory Disease (PID) at an average cost of \$1,167 per patient. Through screening, these costs are avoided. A randomized controlled trial of chlamydia screening and treatment demonstrated a 56% reduction in the incidence of PID allowing every dollar spent on early detection to save an estimated \$12 in complication- associated costs.

**TB Control Program:** The Prescription Services Program is funded through state allocations, as there are federal restrictions that do not allow federal funds to purchase TB medications. Tuberculosis can be transmitted by a person’s cough or being in close proximity with an infected individual. Tuberculosis is an airborne, infectious disease. To treat latent tuberculosis infection it costs \$15, \$2,000 to treat TB disease, and \$250,000 to treat multiple drug resistant TB. By treating a person for latent TB infection, it avoids the future costs associated with TB disease and multi-drug resistant TB. Early treatment also avoids the cost of close contact investigations, which is the investigation of identifying persons exposed to an active case. In 2003, of the 25 infectious cases of TB investigated there were 569 persons exposed.

**Prescription Services Program:** Iowa’s investment of \$145,515 provides the vehicle for the STD and TB programs ability to treat disease at a reduced cost rather than provide medical care for the severe complications if the disease is left untreated. For example, one Sexually Transmitted Disease prescription can cost the state of Iowa \$0.89 but prevent thousands of dollars in hospital costs caused by severe complications that will result if left untreated. One Latent Tuberculosis Infection prescription can cost the state of Iowa \$15, but prevent thousands of dollars in hospital costs caused by severe complications that will result if untreated. The typical cost for non-resistant TB disease case is \$2,500; this includes all medical care and medication. Untreated Tuberculosis and Sexually Transmitted Diseases if allowed to develop disease complications can result in ten to 100 times the initial treatment cost.

**Disparate and at risk/vulnerable populations:** The combined state and federal funding provides these services to all Iowans regardless of age, race or ethnicity, or socioeconomic status. Particular attention is provided to those Iowans diagnosed with an infectious or communicable disease (HIV and Tuberculosis). Children receive the same treatment for TB as adults do. Chlamydia can be transmitted to an infant during birth and result in conjunctivitis and pneumonia, so screening and testing is offered in prenatal sites and during prenatal visits at selected providers. An infant born to a mother with chlamydia has a 25-50% chance of developing an eye infection and a 10-20% chance of developing pneumonia. Rates of infection are highest among adolescents and young adults. The HIV Prevention Program targets high-risk youth for HIV prevention services. Children receive the same services as adults for HIV care.

**Impact on Iowans: Sexually Transmitted Diseases and HIV Programs:** There are currently 1,125 Iowans living with HIV/AIDS. All are eligible to benefit from these services. The consortia provide essential health and support services to 500 clients per year. Through the ADAP Program, 335 clients receive medications per year (approximately 220 per month).

Funding was provided for the maintenance of 19 established counseling, testing, and referral sites. In 2003, 10,688 tests were completed at the sites. Thirty-nine positives were identified. Services are coordinated statewide to provide for STD, TB, and Hepatitis testing as well. In 2003, 42 persons were reported with HIV and 76 persons with AIDS. Of these, 80 were receiving a diagnosis of HIV infection for the first time. At the end of 2003, there were 1,180 Iowans living with HIV or AIDS. Just over 88% of

persons with new diagnoses were referred to disease prevention specialists for partner counseling and referral services. Seventy-five contacts were named and counseled. Of these, 12 were HIV infected, including 2 persons who had not been previously diagnosed and were unaware of their infection.

In 2003, 19 projects were funded to provide interventions to prioritized populations. 8,017 clients were reached through the various interventions. In 2004, IDPH provides funding to 14 agencies to provide curriculum-based interventions to six targeted priority populations. Monitoring of the epidemic provides valuable trend information in which to target prevention and care services. Monitoring and evaluation of prevention projects provides evidence that science-based interventions are utilized appropriately.

There were 6,491 cases of chlamydia in 2003. In 2003, the age group from 15-24 years of age accounted for 80.4% of all chlamydia cases. The IIPP reported 3,372 of these cases, which is 52% of all reported cases of chlamydia in Iowa. There were 1,554 cases of gonorrhea, and 17 cases of syphilis reported in Iowa in 2003. Screening, testing and treatment services are based on national STD Guidelines. Partner counseling and Referral Services provides for early follow-up, prevention of complications and intervention of disease transmission. Early treatment and referral and partner notification prevents the complications from STDs. If funding ceases for the STD and HIV programs, early screening and testing would be impacted, resulting in an increase risk of exposure to the general population and increase medical costs (at least ten times greater than initial treatment costs).

**TB Control and Prevention:** The practice of directly observed therapy (DOT) prevents treatment failure, relapse, and multi-drug resistant tuberculosis. DOT is the only way to ensure completion of therapy and thus stop the transmission of disease. An estimated 150,000 Iowans are currently infected with tuberculosis (TB). TB case rates in Iowa are now at historical all-time low due in large part to the TB control practices IDPH promotes and provides. TB disease has decreased from an average of 60 new cases per year to 40 new cases in FY2003. If funding for this program ceases, TB cases would rise, DOT would cease, and the likelihood of multi-drug resistant TB would increase. In Iowa, one multi-drug resistant case of TB cost over \$400,000.

**Prescription Services Program:** Iowa's health care providers and patients seeking treatment and prevention services for sexually transmitted diseases and tuberculosis infection and disease would have limited means of providing treatment to low income patients if this program is deprived of funding. The state medication program filled approximately 2,200 prescriptions for latent TB infection in FY2003. Per CDC studies, 10% of cases of latent TB infection not receiving treatment will progress to an infectious TB case. Therefore, the public will be exposed to an additional 220 active cases of TB, resulting in additional medical and personnel costs.

## **PERFORMANCE MEASUREMENT AND TARGET**

### **HIV:**

By 2008, one percent of all tests performed by HIV counseling, testing, and referral sites will have a positive result. Baseline FY'04 – 0.36%.

By 2008, 100 percent of newly identified confirmed HIV positive tests results are given to clients. Baseline FY'04 – 100%.

### **TB:**

By 2008, 100 percent of TB patients will complete a course of curative TB treatment within 12 months of initiation of treatment. Baseline FY'04 – 97%.

### **STD:**

By the year 2008, chlamydia incidence will be reduced to no more than 150 cases per 100,000 populations. Baseline FY'04 data – 220.8 cases per 100,000 population.

By the year 2008, gonorrhea incidence will be reduced to no more than 25 cases per 100,000 population. Baseline FY'04 data – 52.8 infections per 100,000 population.

By the year 2008, reduce primary and secondary syphilis incidence will be reduced to no more than 0.25 cases per 100,000 population. Baseline FY'04 data – 0.47 infections per 100,000 population.

#### **PRICE AND REVENUE SOURCE**

**Total Price: \$5,791,111 (\$286,073 state)**

<b>Expense Description</b>	<b>Amount of Expense</b>	<b>FTEs</b>
Status Quo Direct Costs	5,593,291	20.35
Status Quo Administrative Costs	197,820	3.10
<b>Total</b>	<b>5,791,111</b>	<b>23.45</b>

<b>Revenue Description</b>	<b>Amount</b>
Status Quo General Fund	286,073
<b>Total State Funds</b>	<b>286,073</b>
Other (intrastate receipts, private grants, etc.)	55,230
Federal Funds	5,449,808
<b>Total Other Sources of Funding</b>	<b>5,505,038</b>
<b>Total</b>	<b>5,791,111</b>

# OFFER FOR IOWANS

## IDENTIFYING INFORMATION

**Offer Identifier:** H\_588\_5

**Offer Name:** Building Healthy Communities in Iowa—Increasing Access to Quality Health Care

**This offer is for an:** status quo existing activity.

**Result(s) Addressed:** Improve Iowans Health

**Participants in the Offer:** IDPH, Local public health

**Additional Stakeholders:** Iowa Department of Economic Development, Iowa Department of Education, Iowa Department of Human Services, Local Boards of Health, Local Boards of Supervisors, Local Public Health providers, Home and Community-based providers, health care facilities and providers in Health Professional Shortage Areas, Insurance Companies, Iowa-Nebraska Primary Care Association, Iowa Hospital Association, Iowa Health Care Association, Iowa Association of Homes for the Aging, Iowa Care Givers Association.

**Person Submitting Offer:** Mary Mincer Hansen, RN, PhD

**Contact Information:** Iowa Department of Public Health; Phone: 515-281-8474 Fax: 515-281-4958

## OFFER DESCRIPTION

The Health Buying Team is seeking offers that assure “All Iowans Have Access to Quality Care,” that “Improve Preventative Strategies and Health Education,” “Improve Quality of Life,” and “Improve the Health Care System.” The Iowa Department of Public Health, in collaboration with the partners listed above, proposes the following activities to achieve these strategies:

- 1) **Rural Health:** Improve access to quality health care for rural and underserved populations. Collect and distribute information on rural health issues and coordinate resources. Increase access to health services for immigrants, refugees, migrants, minorities, and underserved populations by developing resources for cultural competency and networking of bilingual health professionals. Provide technical assistance to communities using health care assessments and planning. Monitor and assess rural health issues and support policy development toward improving access to quality health care for rural and underserved populations.
- 2) **The Primary Care Recruitment and Retention Endeavor (PRIMECARRE):** Improve access to health care in underserved areas by recruiting and retaining health care professionals. Assist communities in recruiting and retaining health care professionals in designated shortage areas. Provide loan repayment grants for primary care, mental health and oral health professionals in return for full-time employment in a public or non-profit health facility for a two-year service commitment.

To support and strengthen the activities above, IDPH will perform the following activities using federal or other sources of funding:

- 1) **Covering Kids/hawk-i Outreach:** Reduce the number of uninsured children, focusing on minority and hard-to-reach vulnerable populations. Increase enrollment of eligible children in publicly funded insurance programs. Assess service capacity by county, including school and faith-based activities and health provider resources. Convene stakeholders in developing community-based outreach and

enrollment plans to build on existing capacity and resources and avoid duplicating effort. Provide statewide leadership for coordinated outreach strategies, resources, tools, and evaluation. Investigate and recommend strategies that simplify enrollment and renewal processes for publicly funded health insurance programs.

- 2) **Center for Health Workforce Planning:** Address the shortage of nurses, nursing assistive personnel, and the entire healthcare workforce in Iowa. Conduct research to assess the status of health care workforce shortages. Identify barriers to recruitment and retention of health care workers. Develop testing strategies at the local level to reduce vacancies and turnover in hospitals, long-term care facilities, and home/community-based agencies. Develop strategies to promote the advancement of nurses and nursing assistive personnel through continuing education and training. Promote and assure a viable health care workforce in Iowa. Develop a workforce prediction model for nurses and nursing assistive personnel.
- 3) **Small Hospital Improvement Grant Program:** Provide resources to small rural hospitals to implement Prospective Payment Systems (PPS), comply with the Health Insurance Portability and Accountability Act (HIPAA), reduce medical errors, and support quality improvement (QI) strategies. Support activities of contracts awarded to 76 eligible hospitals including staffing, education, technology purchases and updates, and renovations identified by the hospitals to meet their needs. Provide on-going technical assistance and consultation in planning activities, contracts, and payment process.
- 4) **Primary Care:** Determine health professional shortage areas and medically underserved area designations. Provide recruitment and retention technical assistance to communities. Assist in placing National Health Service Corps scholars and in graduates repaying loans by serving in shortage areas. Assist in establishing and expanding Community Migrant Health Centers. Coordinate sponsorship of J-1 Visa waiver physicians in shortage areas.
- 5) **Critical Access Hospital Program/Medicare Rural Hospital Flexibility Program (FLEX):** Improve access to health care by enabling full service hospitals in rural areas to transition to a critical access hospital (CAH) designation. This assures a more comprehensive rural health infrastructure and access to quality health care services in rural Iowa. A critical access hospital receives reasonable, cost based reimbursement for inpatient and outpatient services. Help communities evaluate if the CAH designation will benefit a local health care facility. Provide mechanisms for educational workshops covering emerging hospital issues and foster community partnerships that include an emergency medical services component.

## **OFFER JUSTIFICATION**

**Return on investment:** Iowa's \$528,934 investment is enhanced by \$3,742,666 in other sources of funding including federal funding, intrastate receipts, and private grants. State funding allows the department to administer programs, provide technical assistance, and draw down federal funds. Additional funds that communities can access include Rural Health Network Grants, Rural Health Outreach Grants, AED grants, and others. Increased state funds would enable staff to apply for additional federal funds to support local communities through system development, recruitment, and retention. State funding enables these programs to administer programs, provide services, and draw down federal funds to provide additional services, grants, and staff. The federal government requires \$3 state funding for every \$1 in federal funds for the State Office of Rural Health. State funds provide a 1:1 match for federal funds for loan repayments to health professionals in the PRIMECARRE program.

**Disparate and at risk/vulnerable populations:** All Iowans receive services from this offer. Vulnerable populations receiving additional focus include rural, underserved, elderly, youth, racial/ethnic minorities, health providers, agencies, and organizations and rural communities. Support services to local health

departments, rural hospitals, network hospitals, and health care practitioners assure quality health services are provided to all Iowans.

### **Impact on Iowans**

Approximately 90% of Iowans have health insurance coverage. However, insurance does not always ensure access to care. There are 31 hospitals and 112 rural health clinics in a Federal or Governor's Health Professional Shortage area and 60 critical access hospitals in Iowa. Providing information, technical assistance, and resources to these health systems, facilities, and providers allows them to increase quality health care access to all Iowans, provide a culturally competent and qualified health workforce that meets the changing needs of Iowans, identify health issues and opportunities, provide technical assistance in collaborating on health issues, provide programs and policymaking, and efficiently use limited health resources at the federal, foundation, state, and local levels.

### **PERFORMANCE MEASUREMENT AND TARGET**

Percentage of Iowans with health insurance coverage: Baseline – 90% in 2002-2003. Target – statistically significant increase.

Percentage of Iowans rating their own health at good to excellent: Baseline – 88% in 2003. Target – 88%.

Percentage of eligible children under age 19 enrolled in the *hawk-i* program: Target – 64%.

Number of health care facilities that enhance or expand health care services to the underserved by increasing the health workforce and bureau-sponsored programs: Baseline established in FY05.

Number of health professionals who report increased knowledge and skills as a result of attending bureau-sponsored trainings and workshops: Baseline established in FY05.

### **PRICE AND REVENUE SOURCE**

**Total Price: \$4,271,600 (\$528,934 state)**

<b>Expense Description</b>	<b>Amount of Expense</b>	<b>FTEs</b>
Status Quo Direct Costs	4,125,559	14.55
Status Quo Administrative Costs	146,041	2.22
<b>Total</b>	<b>4,271,600</b>	<b>16.77</b>

<b>Revenue Description</b>	<b>Amount</b>
Status Quo General Fund	528,934
<b>Total State Funds</b>	<b>528,934</b>
Other (intrastate receipts, private grants, etc.)	595,529
Federal Funds	3,147,137
<b>Total Other Sources of Funding</b>	<b>3,742,666</b>
<b>Total</b>	<b>4,271,600</b>



# OFFER FOR IOWANS

## IDENTIFYING INFORMATION

**Offer Identifier:** H\_588\_1

**Offer Name:** Building Healthy Communities in Iowa

**This offer is for a:** status quo existing activity and improved existing activity.

**Result(s) Addressed:** Improve Iowans Health

**Participants in the Offer:** IDPH, Local Boards of Health, Local Public Health Providers, Health Care Providers, Public and Private Hospitals, Home and Community Based Providers, Centers for Disease Control and Prevention (CDC), University of Iowa, University of Northern Iowa – Youth Fitness and Obesity Institute, Iowa State University Extension, Iowa Broadcasters Association, Iowa Department of Education.

**Additional Stakeholders:** mental health providers, American Red Cross, community-based prevention and treatment programs, American Heart Association, Area Agencies on Aging, Des Moines Child and Adolescence Guidance Center, Five A Day Coalition of Iowa, Healthy Child Care, Iowa Academy of Family Practice Physicians, Iowa Association of Physical Health Activity, Recreation and Dance, Iowa Dental Association, Iowa Dental Hygienists Association, Iowa Department of Elder Affairs, Iowa Department of Natural Resources, Iowa Department of Transportation, Iowa Dietetic Association, Iowa Fit Kids Coalition, Iowa Food Policy Council, Iowa Fruit and Vegetable Growers Association, Iowa Games, Iowa High School Athletic Association, Iowa Lactation Task Force, Iowa Medical Society, Iowa Nutrition Network, Iowa Partners for Healthy Kids, Iowa Wellness Council, La Clinica, Midwest Dairy Council, Wellmark Blue Cross & Blue Shield, Iowa Hospital Association, YMCA Activate America Project, Iowa Department of Human Services.

**Person Submitting Offer:** Mary Mincer Hansen, RN, PhD

**Contact Information:** Iowa Department of Public Health; Phone: 515-281-8474 Fax: 515-281-4958

## OFFER DESCRIPTION

Building Healthy Communities in Iowa will result in the entire state of Iowa being a healthy community.

A healthy community means:

- **All Iowans *can* lead healthier lives.**
- **Iowa's communities can become healthier places to live.**
- **Healthy kids learn.**
- **A healthy workforce is productive.**
- **A healthy Iowa attracts business.**
- **Healthy aging contributes to productive and quality life for older Iowans and reduces costs.**
- **Success depends on public-private partnerships.**
- **Achieving better health depends on having a strong public health system.**

Building healthy communities in Iowa will not happen by accident or through a single program. Real health improvement will be achieved only through coordinated efforts on many fronts. Healthy communities provide the foundation for all the services that Public Health provides for Iowans. Thus, all IDPH programs are committed to transforming approaches to helping build healthy communities in Iowa.

Building on the success of “Community Empowerment” in Iowa – developing public-private partnerships; getting a cross-section of communities involved; using education, health, and human service collaborations, and reallocating Public Health resources will create healthy communities – healthy places to live, work, and raise a family!

A healthy community approach engages local communities in a visioning process, which includes assessing the present, planning for the future, and evaluating results. The IDPH will provide technical assistance to local boards of health and others to ensure the engagement of a diverse group of community partners, including businesses, not-for-profits, faith-based organizations, and individuals. These local coalitions will, with the assistance of IDPH, identify potential for action to improve their community’s health; share best practices, tools, and other information; actively participate in sustained change; obtain and leverage additional federal and private resources; and generate success stories that will help spread improved health across the state of Iowa.

The long-range goal for Iowa is an integrated public health system, which assures essential services are provided to all Iowans including disadvantaged and vulnerable populations. Simultaneous efforts will continue building public health infrastructure in the state, while also leading and encouraging public health partners to vision, work toward, and achieve *Healthy Communities*. Iowa, functioning as a *Healthy Community*, will create a statewide community network that supports health promotion, prevention, and chronic disease management. The plan is that such strategies and partnerships will energize local communities, including “Great Place” communities, to transform their cultures into those which promote healthy lifestyles and which, collectively, transform the state of Iowa into one healthy community.

**Status Quo/Improved Service – Building Healthy Communities in Iowa:** Six additional IDPH regional community health consultants will work with local boards of health and public health agencies to build capacity for the healthy communities approach. IDPH will also provide grants to communities to help develop specific actions to become a healthy community. Local boards of health and local communities can identify the specific needs of Iowans that are unique to that community, and by using resources more flexibly can promote health and wellness in the community. Incentives will be built into the grants to encourage and support regional collaborations.

Achieving better health and healthy communities depends on having a strong public health system at both the state and local levels. The department provides support to local boards of health as they fulfill their statutory responsibility to carry out the core public health functions and essential public health services in all 99 counties. Local boards of health assess the health status of their communities and develop a health improvement plan to deal with identified health priorities. Community partners are encouraged to participate in the Community Health Needs Assessment and Health Improvement Plan, bringing to the table their knowledge of the community and expertise regarding health. IDPH assists local boards of health in carrying out the Community Health Needs Assessment and linking their Health Improvement Plan to *Healthy Iowans 2010*, the state of Iowa’s health improvement plan. The department allows local boards of health to use contract funds to support these assessments and the planning process. Regional community health consultants employed by IDPH support the efforts of local boards of health by providing advice on how boards, working with multiple community partners, can meet the needs of their local communities better. The consultants provide advice on how public health funding might be used more efficiently and effectively, reducing duplication and fragmentation in providing local services. Specific IDPH programs provide data and assistance with wellness and chronic disease prevention planning and development.

### **Building Healthy Communities in Iowa for Our Children**

Building healthy communities in Iowa begins with Iowa’s youngest population: children. The IDPH has an essential role in supporting activities that promote healthy growth and development of children. Many

of the department's programs such as immunizations, nutritional education such as "Pick a Better Snack" and WIC, dental health programs, tobacco prevention programs, and primary/preventative screenings and health care contribute toward healthy children as part of a healthy community.

**New Service – A Healthy Communities Approach to Youth Fitness and Healthy Nutrition:**

Develop partnerships at both the state and community levels to focus on improving the health of youth. Assist communities in launching a "visioning" process to help decide where each community is and where it should go to become a "healthy community." Mobilize communities to address youth fitness and healthy nutrition.

Implement a multicultural, statewide media campaign to increase public awareness of the benefits of physical activity and nutrition on child/adolescent health.

- ◆ Partner with the U of I, College of Public Health to assure a healthy communities approach to improving childhood fitness and healthy nutrition in Iowa communities.
- ◆ Partner with the Iowa Broadcasters Association to show quarterly 1-week messages about physical activity and nutrition.
- ◆ Partner with a public relations agency to develop key project messages and a web site that includes a database of best practices related to physical activity and healthy nutrition.
- ◆ Use multi-media forms to build awareness and promote behavior change including newspapers, video, brochures, electronic mentoring software programs, CD-ROM, DVD, point-of-sale and insert ads, and public events with the Governor and Lt. Governor.
- ◆ Partner with UNI-Youth Fitness and Obesity Institute and ISU Extension to develop a social marketing campaign that is child and family-friendly and that promotes physical activity and nutrition behavior change.

Provide technical assistance to communities to do school/community assessments and plans for improvement.

- ◆ Partner with the Iowa Department of Education to monitor baseline and changes in physical activity and nutrition of students in Iowa schools.
- ◆ Assess the health of Iowa students in grades K through 12.
- ◆ Provide specific interventions online to adults and their children based on the results of these health screenings.

**Building Healthy Communities in Iowa for Adults**

A healthy community approach continues into adulthood. The department focuses on maintaining health for as long as possible and early prevention and detection of chronic disease. Local public health entities are instrumental in promoting healthy communities with campaigns aimed at reducing the risk of cardiovascular disease or tobacco use. Screenings for acute disease such as high blood pressure or elevated cholesterol, exercise programs and walking paths, nutritional education sessions including weight reduction, adult immunizations, and substance abuse prevention are strategies used by public health providers and community partners in creating a healthy community.

**Status Quo Existing Service – Health Promotion and Chronic Disease Prevention:** Population-based health services target preventable health concerns, help reduce unnecessary complications and costly interventions, and contribute to "healthy aging" and "healthy communities." The department funds community-driven efforts for health promotion, chronic disease prevention, and behavior change. Funding provides direct screening, the development of health promotion and risk reduction materials, and training for health care professionals. The department certifies organizations that provide diabetes education and researches effective nutrition and physical activity behaviors.

Specific chronic diseases and conditions included in this offer include arthritis, asthma, cancer (breast cancer; cervical cancer; prostate cancer; colorectal cancer), cardiovascular disease (CVD), diabetes,

health literacy, obesity and overweight, and physical inactivity. IDPH partners with local boards of health and local public health providers, along with other health providers and the private sector, to support strategies to promote health and prevent disease. Stakeholders affected by the direct services or education provided include the public, schools, daycare providers, and the Medicaid program.

### **Building Healthy Communities in Iowa for Seniors**

Healthy communities include Iowa's older adults. Communities provide personal health services and home maintenance programs that allow older adults to stay home for as long as possible. Public health is instrumental in helping older adults access these services. By providing direct service or coordinating care, public health identifies health care concerns of older adults and targets interventions to promote a healthier aging process. Preventive services such as flu vaccines, fall prevention programs, home safety evaluations, and foot care clinics aid the older adult in optimal living. Skilled nursing home visits assist in preventing, delaying, or reducing inappropriate institutionalization. Home Care Aide and Homemaker services, respite care, and chore services help the frail elderly maintain good personal hygiene and activities of daily living as well as maintain a safe, clean environment in their home. Protective services stabilize a family's home environment to prevent abuse or neglect.

**Status Quo Existing Service – Home and Community Based Services:** Public Health Nursing and Home Care Aide contracts provide seniors, adults with disabilities, and those at risk of abuse with safe and quality living options in their own community. All older Iowans are likely to use home and community based services to achieve these results. Public Health Nursing and Home Care Aide contracts seek to prevent, reduce, or delay institutionalization of low income, elderly, and disabled Iowans, prevent illness, and promote healthy communities. Achieving this goal will enhance the quality of life for Iowa's elderly and disabled. Contractors provide necessary public health nursing and home care aide services. IDPH regional community health consultants provide technical assistance and support the local board of health in using Local Public Health Services (LPHS) funding to identify and address needs for home and community based services. On-site reviews at least every three years assure compliance with Iowa Administrative Code 641 Chapters 79 and 80, and monthly reviews of activities assure appropriate use of the funds.

### **OFFER JUSTIFICATION**

**Return on Investment:** Iowa's \$13,996,108 investment is enhanced by \$8,434,424 in other sources of funding including federal funding, intrastate receipts, and private grants. Allocating more funds to health promotion and early detection efforts helps prevent or delay the onset of chronic disease and decreases the high cost of managing medical needs.

Research studies have shown that obesity increases the risk of developing a number of health problems including diabetes, high blood pressure, heart disease, stroke, some types of cancer, gall bladder-disease, osteoarthritis, and obstructive sleep apnea. Overweight and obesity and their associated health problems have a significant economic impact on the health care system. Direct medical costs may include preventive, diagnostic, and treatment services. Indirect costs relate to the value of income lost from decreased productivity, restricted activity, absenteeism, bed days, and premature death. The cost of obesity has been estimated at \$783 million annually for the state of Iowa.<sup>1</sup> Approximately, 9.4% (\$198M) of Iowa's Medicaid costs are directly related to obesity. Thus, preventing overweight and obesity and their associated health problems would provide hundreds of millions in savings to Iowa businesses, government, and individuals.

In Iowa, most health promotion and chronic disease programs are federally funded. Most require matching funds as a part of the total program award. State-allocated funding for the Medicaid program used for the detection and management of chronic diseases is reported to the CDC as matching funds. Each local nutrition coalition also provides a 50% in-kind match for federal funding. The Breast and

Cervical Cancer Early Detection Program reports the state's portion of Medicaid spending for the early detection of breast and cervical cancers as matching funds allowing Iowa to draw federal funding for that program. Similarly, the "Well-Integrated Screening and Evaluation for Women Across the Nation" cardiovascular study reports the state's portion of funds spent on the detection of cardiovascular disease in low-income women as matching funds allowing that study to use federal funds. The Diabetes Prevention and Control program, through its certification process, allows outpatient diabetes education programs to bill for third party reimbursement for diabetes education.

Cardiovascular disease (CVD) risk-reduction programs are cost-effective. A typical program can expect to provide \$1.21 to \$3.29 in benefits from reduced medical costs for every \$1 in costs.<sup>1</sup> Other programs focused on improving behaviors that reduce the risk for CVD disease, cancer, and diabetes range from \$1.49 to \$4.91 (median of \$3.14) in benefits for every dollar spent on the program.<sup>2</sup> These programs improve employee health, increase productivity, and yield a significant return on investment for the employer.

Home and community based service providers initially access third party payer sources such as Medicare, Medicaid, and private insurance. Those Iowans who do not have access to other funding use grant funds as a last resort to "fill the gap." In FY04, the grant served over 67,000 Iowans, generated over \$1.3 million in sliding-fee-scale income, and expanded service by 13%.

Local public health service (LPHS) funds pay for only a part of the cost of community health needs assessments. Community partners contribute their time and other available resources, such as meals and meeting space. Some community partners may contribute money toward the cost of a community survey, or toward the cost of providing and evaluating a new service in the community. LPHS funds spent toward the community health needs assessments result in communities planning and dealing with priority health problems. While LPHS funding does not directly generate funding, the community health needs assessment is a valuable tool that can be used to generate federal grant funds by proving unmet community needs.

**Disparate and at risk/vulnerable populations:** All Iowans will benefit from these services with a special focus on children and their families especially Hispanics, American Indians, and African Americans who are more likely to be overweight. Specific efforts also target the following special populations: multicultural and rural populations; Iowans who have asthma including children, their families, educators, and caregivers; Iowans who are underinsured and uninsured; women; adolescent girls age 12 and older; Iowans with low to moderate household incomes (up to 250% of the Federal Poverty Guidelines for some programs); community-based organizations; elderly; disabled; persons at risk of abuse and/or neglect; health care professionals; domestic violence counselors; professional associations, regulatory boards, human resource and training professionals, and advocates for dependent abuse and/or child abuse prevention.

The Comprehensive Cancer Control Program includes children in its focus on cancer prevention with projects targeting obesity, sun exposure to prevent skin cancer, and nicotine use. Home and community based services are provided to children through nursing services and home care aide services (including protective services to children at risk of abuse or neglect). Community health needs assessments gauge health needs for populations of all ages, including infants and children. The health improvement plan is developed to address identified problems. Through these services, qualified health care professionals and health care facilities are able to provide services to children in Iowa.

**Impact on Iowans:** All Iowans are at risk for overweight and obesity. In 2002, 61% of Iowa adults were overweight or obese (CDC-BRFSS). Also in 2002, 23% of non-Hispanic white adults, 25% of non-Hispanic black adults, and 25% of Hispanic adults in Iowa were obese (CDC-BRFSS). The obesity rate

for Iowa adults increased 79% from 1990 to 2002 (CDC-BRFSS). Thirty percent of low-income children aged 2–5 years in Iowa were overweight or at risk of becoming overweight (CDC-PedNSS, 2002). In 2003, 11.6% of Iowa WIC children ages 1-5 years were above the 95 percentile for weight for height (37,000 children).

While youth have lower prevalence than adults, the risk of living with a chronic disease in adulthood increases when onset begins at younger ages. Risk factors for heart disease, such as high cholesterol and high blood pressure, occur more often in overweight children and adolescents than in children with a healthy weight. Type 2 diabetes, previously considered an adult disease, has increased dramatically in children and adolescents. Overweight and obesity are closely linked to type 2 diabetes. Overweight adolescents have a 70% chance of becoming overweight or obese adults. This increases to 80% if one or more parent is overweight or obese. The most immediate consequence of overweight, as perceived by the children themselves, is social discrimination. This is linked with poor self-esteem and depression.

Overweight in children and adolescents is generally caused by a lack of physical activity, unhealthy eating patterns, or a combination of the two, with genetics and lifestyle also playing important roles in determining a child's weight. Our society has become very sedentary. Television, computer, and video games contribute to children's inactive lifestyles. Forty-three percent of adolescents watch more than 2 hours of television each day. Children, especially girls, become less active as they move through adolescence. Thus, youth are an important target for intervention. Moderate lifestyle changes have been shown to improve health indicators. Keeping Iowans physically active at all ages and eating better (more whole grains and fruits and vegetables, lower consumption of foods high in fat, sodium and sugar) will improve productivity, health, and lower health care costs.

In 1999, as it became apparent that obesity was becoming a major health concern, IDPH established a Health Promotion Team to align the activities of various parts of the department that address nutrition, physical activity, weight reduction, and disease prevention. With funding from CDC, the Iowa Physical Lifestyle and Nutrition Initiative will be established through the Division of Health Promotion and Chronic Disease Prevention and the Bureau of Nutrition and Health Promotion. Additional private partners will be identified to ensure diversity. Many existing IDPH programs deal with nutrition health and obesity prevention:

- Mini-grants have been made to seven Iowa communities to develop, implement, evaluate, and institutionalize intervention strategies.
- A *5 + 5 Manual* was developed to provide guidance for community efforts to encourage people to eat at least five fruits and vegetables a day and be physically active at least five times a week.
- *Lighten Up Iowa* is a 5-month statewide competition started in 2003 in which more than 1,300 10-person teams of adults compete to lose weight through healthy eating and physical activity.
- *The Prevention of Child and Adolescent Obesity in Iowa* report was completed.
- Pick a **better** snack™ is a social marketing campaign using media and classroom materials to increase children's fruit and vegetable consumption.
- A Health Promotion Team Summit on overweight/obesity and physical inactivity was held.
- A program to distribute free fruits and vegetables to schools is being pilot tested in 53 schools.

Cardiovascular disease was the leading cause of death for Iowans in 2001, with deaths from heart disease and stroke accounting for 38% of all deaths. Heart disease death rates are 62% higher for men than women. Stroke death rates are 52% higher for Hispanics and 43% higher for blacks than whites. Cancer is the second leading cause of death in Iowa. It accounts for 25% of deaths in the state. The American

Cancer Society estimates that 15,940 Iowans will be diagnosed with cancer in 2004 and 6,570 will die. Spending for health promotion and chronic disease prevention and management helps teach Iowans about their risk of developing or being diagnosed and the benefits of behavior-change to prevent or slow the development of a chronic disease. Iowans who are uninsured or underinsured can get low or no-cost screenings for breast and cervical cancers and cardiovascular disease. Individuals and organizations across the state benefit as members of the public health system while providing or receiving more coordinated chronic disease-related care and services. Nutrition education to food assistance-eligible families, including seniors, improves health status. The IDPH chronic disease programs funded by the federal government operate under the guidance and direction of the CDC, which bases its programming on evidence-based practices. Routine screening detects disease at its earliest stages, stages at which the cost of treatment is much lower and the disease is most curable. Educating the public, health care professionals, educators, and caregivers is a key part of preventing the development and advancement of chronic disease. By providing screening services for breast and cervical cancers, underinsured and uninsured women in Iowa are able to receive cancer screenings as often as their peers with insurance. Women screened and diagnosed with a precancerous or cancerous lesion through the Breast and Cervical Cancer Early Detection Program are eligible for treatment under a Medicaid optional waiver program. Chronic disease education reduces complications and the progression of these diseases.

Public Health Nursing and Home Care Aide provided services to over 12,500 clients in 2003. Overall, this includes over 720,000 hours of home care aide services and over 38,000 visits by public health nursing. Public Health Nursing Home Aide grants promote home and community based services, improve access to long-term care options, and help to improve the quality of life for the elderly and disabled. This helps make Iowa an attractive state in which to age in place. The number of low-income clients who received nursing and home care aide home services was 8995 in FY04. These services reduced, delayed, or prevented institutionalization for 8702 Iowans. In most cases, home and community based services can care for people in their own homes more efficiently than an institution and with greater personal satisfaction. When a person can stay at home with occasional care, it is cheaper to provide that care at home, preventing institutionalization that may have to be financed with public funds.

### **PERFORMANCE MEASUREMENT AND TARGET**

Percent of Iowans rating their own health at good to excellent: Baseline 88% in 2003. Target 88%.

Percent of local boards of health who have completed a community health needs assessment and health improvement plan that links to Healthy Iowans 2010. Baseline established in 2000 – 85%. Target – 100%.

Percent of local boards of health who have identified public and private funds to support a plan that includes strategies to “build a healthy community”. Baseline to be established in FY2006. Target – 30%.

Percent of children and youth with a BMI  $\geq$  95<sup>th</sup> percentile for age: Baseline established in FY06.

Percent of Iowa adults eating five fruits and vegetables a day: Baseline 17.1% in 2003. Target 19.8%.

Percent of Iowa adults participating in moderate physical activities for 30 minutes or more five or more times/week: Baseline 43.6% in 2003. Target 44.7%.

Percent of Iowa adults with a BMI > 25: Baseline 61.6% in 2003. Target – 58%.

Deaths due to heart disease per 100,000 population: Baseline 278.3 in 2002. Target – 242.0 by 2010.

Deaths due to cancer per 100,000 population: Baseline 2000-2002 – 188.5. Target – 173.0 by 2010.

Number of facilities certified to provide diabetes education to Medicaid clients: Baseline 82 in 2004. Target – 82.

Percent of eligible women screened for breast cancers and cervical cancers: Baseline – 26.3% in 2000-2001. Target – 25% (due to decreased federal funding).

Percent of home care aide clients where access to care has delayed, reduced, or prevented institutionalization: Baseline 96.7% in FY2004. Target – maintain at least 92%.

### **PRICE AND REVENUE SOURCE**

**Total Price: \$22,430,532 (\$13,996,108 state)**

<b>Expense Description</b>	<b>Amount of Expense</b>	<b>FTEs</b>
Status Quo Direct Costs (including \$951,680 reallocated)	19,904,029	39.35
Status Quo Administrative Costs	767,692	6.00
New Service Direct Costs	1,684,854	4.00
New Service Administrative Costs	73,957	0.61
<b>Total</b>	<b>22,430,532</b>	<b>49.96</b>

<b>Revenue Description</b>	<b>Amount</b>
Status Quo General Fund	11,417,034
Status Quo Tobacco Fund	1,157,482
New Service General Fund	1,421,592
<b>Total State Funds</b>	<b>13,996,108</b>
Other (intrastate receipts, private grants, etc.)	1,387,624
Federal Funds	7,046,800
<b>Total Other Sources of Funding</b>	<b>8,434,424</b>
<b>Total</b>	<b>22,430,532</b>

### **REFERENCES**

<sup>1</sup> Centers for Disease Control and Prevention. Chronic Disease Notes & Reports. Vol. 17(1). Fall 2004.

<sup>2</sup> US Dept of Health and Human Services. Prevention Makes Common “Cents”. Washington, DC. September 2003.

**“Public health should be as fully organized and as universally incorporated into our governmental system as is public education. The returns are a thousand fold in economic benefits, and infinitely more in reduction of suffering and promotion of human happiness.”**

*– Herbert Hoover, inaugural address March 4, 1929*